

Serial No. 09/347,891
YOO.PNO321/PHOEN.01.HU.180

August 6, 2002

IN THE CLAIMS

Please rewrite claim 4 as follows:

C1
SUB
D1

4. (AMENDED) A method for constructing a WVPN (Wireless Virtual Private Network) for a CDMA system which includes a mobile telephone serviced by a private network group, a BTS (Base Transceiver System) for transmitting and receiving a message with the mobile telephone, a BSC (Base Station Controller) for managing the BTS, a MSC (Mobile Switching Center) including a MSA (Mobile Signaling Access), a MCC (Mobile Call Control), and a VLR (Visitor Location Register), a HLR (Home Location Register), and a SCP (Service Control Point) for storing an extension number with respect to a calling subscriber serviced by a private network group, a method for constructing a WVPN for a CDMA system comprising the steps of:

a first step for registering a private network group and extension number to the SCP and judging whether a call by a certain calling subscriber corresponds to an extension number or a MDN (Mobile Directory Number) when a certain calling subscriber calls a certain

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receiving subscriber of the same group as the calling subscriber;

2 / a second step for constructing a mobile communication network
using the MDN in the case that as a result of the first step the call by the
calling subscriber corresponds to the MDN and constructing a WVPN in the
case that the call by the calling subscriber corresponds to the extension
number;

Sub
D1 } a judgement sub-step for judging whether the extension number
transmitted to the SCP exists in the group of the calling subscriber in the
case that when there is the group of the telephone number of the calling
subscriber as a result of the judgement of the first sub-step; and

including a sub-step for transmitting a non-available call connection
guide message to the calling subscriber in the case that the extension
number does not exist in a group of the telephone number of the calling
subscriber as a result of a judgement as to whether there is a group of the
telephone number of the calling subscriber based on a judgement whether
an extension number transmitted to the SCP exists and in the case that the
extension number exists in the group of the calling subscriber as a result of

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C1 ~~a judgement of the judgement sub-step.~~

Please cancel claims 1, 2 and 3 and add the following new claims 5 and 6.

C2 2. 5. (NEW) A method for constructing a WVPN (Wireless Virtual Private Network) for a CDMA system which includes a mobile telephone serviced by a private network group, a BTS (Base Transceiver System), a BSC (Base Station Controller), a MSC (Mobile Switching Center) including a MSA (Mobile Signalling Access), a MCC (Mobile Call Control), and a VLR (Visitor Location Register), a HLR (Home Location Register), and a SCP (Service Control Point) comprising the steps of;

a first step for registering a private network group and extension number to the SCP and judging whether a call by a certain calling subscriber corresponds to an extension number or a MDN (Mobile Directory Number) when a certain calling subscriber calls a certain receiving subscriber of the same group as the calling subscriber; and

a second step for constructing a mobile communication network using the MDN in the case that as a result of the first step the call by the calling

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subscriber corresponds to the MDN and constructing a WVPN in the case that the call by the calling subscriber corresponds to the extension number, wherein said second step includes:

2 a first sub-step for requesting a telephone of the calling subscriber to the HLR, transmitting a telephone number and extension number to the SCP with respect to the calling subscriber, requesting a MDN information of the receiving subscriber, and judging whether there is a group of the telephone number of the calling subscriber;

a second sub-step for judging whether the extension number transmitted to the SCP exists in the group of the calling subscriber in the case that when there is the group of the telephone number of the calling subscriber as a result of the judgment of the first sub-step;

a third sub-step for constructing the WVPN by transmitting the MDN corresponding to the receiving extension number to the MCC in the case that the extension number exists in the group of the calling subscriber as a result of the judgment of the second sub-step; and

a fourth sub-step for transmitting a non-available call connection

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guide message to the calling subscriber in the case that there is not a group of the telephone number of the calling subscriber as a result of the judgement of the first sub-step and in the case that the extension number does not exist in the group of the calling subscriber as a result of the judgement of the second sub-step.

3. 6. (NEW) A method for constructing a WVPN (Wireless Virtual Private Network) for a CDMA system which includes a mobile telephone serviced by a private network group, a BTS (Base Transceiver System), a BSC (Base Station Controller), a MSC (Mobile Switching Center) including a MSA (Mobile Signalling Access), a MCC (Mobile Call Control), and a VLR (Visitor Location Register), a HLR (Home Location Register), and a SCP (Service Control Point) comprising the steps of;

a first step for registering a private network group and extension number to the SCP and judging whether a call by a certain calling subscriber corresponds to an extension number or a MDN (Mobile Directory Number) when a certain calling subscriber calls a certain receiving subscriber of the same group as the calling subscriber; and

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a second step for constructing a mobile communication network using the MDN in the case that as a result of the first step the call by the calling subscriber corresponds to the MDN and constructing a WVPN in the case that the call by the calling subscriber corresponds to the extension number, wherein said second step includes:

C2 a first sub-step for requesting a telephone of the calling subscriber to the HLR, transmitting a telephone number and extension number to the SCP with respect to the calling subscriber, requesting a MDN information of the receiving subscriber, and judging whether there is a group of the telephone number of the calling subscriber;

a second sub-step for judging whether the extension number transmitted to the SCP exists in the group of the calling subscriber in the case that when there is the group of the telephone number of the calling subscriber as a result of the judgment of the first sub-step;

a third sub-step for constructing the WVPN by transmitting the MDN corresponding to the receiving extension number to the MCC in the case that the extension number exists in the group of the calling subscriber as a